

CLAIMS

What is claimed is:

1. A method for the automatic production of hollow bodies from a mixed material,

particularly from concrete, the method comprising:

filling non-solidified bulk material, particularly unset concrete, into mold space between a mold core and an exterior mold in uniform distribution;

compressing the mixed material in the mold space by shaking;

forming an upper centering end by pressing an upper sprue into the unset concrete column;

removing the formed molded body from the mold by vertical extraction and transport to a drying area on edge;

assembling at least some of the mold components by means of releasable connecting means at an assembly area previous to a mold change and transporting the assembly into the molding area as a preassembled assembly;

automatically disassembling the mold components in the molding area depending on the production requirements;

reassembling the mold components in the molding area for a new mold exchange; and

moving the reassembled mold components away from the molding area as an assembly.

2. The method according to claim 1, and further comprising:

directly installing automatically operable clamping means on the respective mold components; and

assembling the mold components employing clamping members motor-operated by pressure means.

3. The method according to claim 1, and further comprising:

installing the individual mold components in an exchangeable housing in the assembly area;

positioning the individual mold components in the molding area together with the

exchangeable housing; and

automatically releasing and reactivating the clamping means between the individual mold

components and the exchangeable housing previous to the removal of the assembly in the molding area in accordance with the production requirements.

4. A facility mounted at a pit at a support construction, for the production of hollow bodies from a mixed material, particularly from concrete, the facility including a control system, the facility comprising:

a support construction within and above the pit;

a mold comprising as components:

a vertically movable exterior mold;

a vertically movable hollow mold core;

at least one shaking device disposed in the mold core; and

a bottom sprue and an upper mold sprue;

a filling device for filling the unset concrete into the mold space; and

handling devices for moving and positioning the mold components;

at least part of the mold components required for a product type being configured to be pre-assembled to an independent assembly by means of clamping means outside of the support construction;

said assembly being transportable into the molding position within the support construction;

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the clamping means being releasable for taking apart the mold components in the molding
18 area in accordance with the production processes, the removal of the mold components after the
operation of the clamping means again being effected as an assembly.

5. The facility according to claim 4, wherein the mold components comprise clamping
2 means attached thereto for a direct assembly.

6. The facility according to claim 4, and further comprising a mobile exchangeable
housing in which the respective mold components are mountable by means of separate clamping
means and which remains in a secured resting position within the support construction during the
4 production process.

7. The facility according to claim 6, and further comprising separate motor-driven or
2 mechanically operable clamping means for releasably connecting the exchangeable housing with
the exterior mold, the mold core, the shaking device and, if required, at least one of the mold
4 sprues.

8. The facility according to claim 4, wherein the clamping means comprise locking
2 bolts which are automatically brought into an engagement with corresponding locking retainers by
vertical movements of the individual mold components.

9. The facility according to claim 6, wherein the clamping means comprise locking
2 bolts which are automatically brought into an engagement with corresponding locking retainers by
vertical movements of the individual mold components.

10. The facility according to claim 7, wherein the clamping means comprise locking
2 bolts which are automatically brought into an engagement with corresponding locking retainers by
vertical movements of the individual mold components.

11. The facility according to claim 8, wherein the clamping means comprise locking
2 bolts which are automatically brought into an engagement with corresponding locking retainers by
vertical movements of the individual mold components.